

**Summary of Animas River Stakeholders Group
History of Watershed Activities
1994 to Present
February 2008**

Excerpted from ARSG webpage: The Animas River Stakeholders Group (ARSG) was formed in 1994 in response to the Colorado Water Control Division's (WQCD) re-evaluation and upgrading of water quality standards for the Upper Animas River Basin. This basin, with the headwaters of the river located near the old mining community of Silverton, Colorado, had long been contaminated by both historic mining practices and natural mineralization. With the implementation of the new standards, and additional standards put in place in 1995, local participants including mining companies, elected officials, local citizens, land owners, environmental groups, and federal agencies came together to address the issues raised by the state. At first, with the diverse interests of the groups involved, the process was slow, however they continued to meet, find common ground, and work together for improved water quality in the Animas River Basin.

Because the Animas River is a very complex and dynamic ecosystem, it would take several years of research and field work to collect the data needed to improve water quality and habitat degradation that has occurred for so many years. In support of the grassroots efforts put forth by the Stakeholders, the WQCC granted an extension of the ambient (existing) water quality standards allowing for additional time to complete field studies, consider remediation techniques, and make meaningful recommendations to the Commission, which they did in 2001.

After studying 1,500 mine sites in the region, ARSG identified 67 priority waste sites that they judged to be the highest ranking contributors of metals in the Animas River. Technology needed for remediation, funds, and property access are the deciding factors in choosing which sites are addressed in what order.

The stakeholder process, although slow and time consuming, has proven to be an effective means of environmental problem solving. A driving force behind the continued efforts of the group is the undesirable alternative of costly enforcement and regulatory intervention that other regions have experienced through Superfund designations. In keeping with community based problem solving the group has chosen minimal internal structure. There is no hierarchy, only the unspoken rules of respect and the services of a coordinator to keep the effort focused. Decisions are made by consensus, not by vote, allowing the feeling of teamwork to prevail. The Stakeholders Group has become a perfect example of local people taking responsibility for their community and their environment

Excerpted from the Use Attainability Analysis (UAA), dated January 2001: The Animas River UAA is unique because it is the result of a wide range of efforts from numerous stakeholders – citizen groups, mining corporations, local, state, and federal government agencies, and private citizens. This ad hoc group, called the ARSG, has no formal structure, yet it has been able to develop a fairly sophisticated analysis of metal loading and associated problems in the historical mining areas surrounding Silverton, Colorado.

This area, known as the Upper Animas Basin, influences water quality in the Animas River mainstem all the way to its confluence with the San Juan River.

The Animas River begins high in the San Juan Mountains, above Silverton, in southwest Colorado. The river flows south through Durango for almost eighty miles to the New Mexico border. It continues nearly thirty more miles, meeting the San Juan River in Farmington, New Mexico.

Approximately 85% of the land in the Upper Animas Basin is under public ownership. A large number of abandoned mines are located on U.S. Forest Service (FS) or U.S. Bureau of Land Management (BLM) property. There are thousands of abandoned sites on public lands throughout the West. In 1997, the Department of Interior began an Abandoned Mined Lands Initiative (AML) to study two pilot areas; to better understand how to handle problems these sites may create. One is the Boulder Creek drainage in Montana and the other is the Upper Animas Basin.

The Initiative is an interdisciplinary, watershed based study designed to characterize metal loading sources and their effects on aquatic biota, discover methods to reduce those loads, and implement reclamation projects. The work combines a wide range of scientific disciplines and expertise from a number of government agencies. The objectives of the Initiative are to:

- ◆ “Determine the physical, chemical, and biological processes that control the environmental effects of abandoned mine lands,
- ◆ Define the extent of contamination and of adverse effects on the aquatic ecosystem,
- ◆ Define pre-mining background conditions to establish realistic targets for cleanup activities,
- ◆ Identify sites that most substantially affect watershed quality and public safety, enabling resources to be invested where they will provide the greatest good,
- ◆ Develop scientific information and methods to characterize contamination, evaluate human and environmental health risk, and design and monitor remediation,
- ◆ Transfer these methods and information to federal land management agencies and industry to enable efficient clean up of abandoned mine lands nationwide.” (Buxton, p.9)

A number of studies from the AML Program have been used in the ARSG UAA for characterizing the watershed. Aquatic life in much of the Upper Animas River watershed, particularly Mineral and Cement Creeks, is limited or even non-existent. In areas where there is adequate flow, heavy metal loading is the main limiting factor curtailing aquatic species. Some metal loading is caused by natural processes, and some loading is the result of human activity. Other possible water quality problems have been investigated, but they are minor relative to the impacts of heavy metals.

There is general agreement that the water quality in the Upper Animas River can be improved. How much improvement is possible or feasible is a difficult question which the ARSG UAA attempts to answer.

One of the goals of the federal Clean Water Act (CWA) is to provide, wherever attainable, "... water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water ..." (CWA, § 101). This is often referred to as the "fishable, swimmable standard." The compliance point used by the ARSG is below the confluence of the Animas River and Mineral Creek, and is known as A72.

As of Winter 2007/2008, the ARSG members have completed over \$35 Million in mine site characterization and remediation. See additional attachment with February 2007 costs that BLM summarized.

EPA experience and personal observations since Fall 2004: The BLM, through its' Abandoned Mine Lands program, EPA, through non-point source (319) funds, and the mining sector have provided significant funds for mine clean up and water quality improvements. There are lingering concerns that EPA CERCLA authority may be used; and this may keep Good Samaritans from doing cleanup in the watershed. EPA's message since 1994 has been that of, "keep showing progress in mine site cleanup and water quality improvement, and EPA will have no need to bring Superfund authority to bear in the watershed." So far that is working very well. The ARSG has completed many remediation projects, as have Colorado Division of Minerals and Geology and the Bureau of Land Management/US Forest Service. BLM received some EPA Federal Facilities funds, which will be used to assess lands in the Eureka area, about 6 miles upstream from Silverton on the Animas River. EPA's regional team consists of Site Assessment and Brownfields (Sabrina Forrest), with backup and technical support from the remediation (Mike Holmes), ecosystems protection (Mike Wireman), Legal Enforcement (Richard Sisk), Removal (Steve Way), and Office of Regional Counsel (Mike Gleason - for Brownfields-related issues) programs. One of us, typically me as a representative from the Brownfields and Assessment program, attends the monthly stakeholder meetings and stays in touch with locals about ongoing and new projects.

In the last 2 ½ years, EPA Region 8 has also been involved in helping support the community's vision for how it could use federal Mine-Scarred Lands Initiative partnership expertise and funds, as well as ongoing support in the overall watershed effort. That partnership has provided some seed money for the larger Animas River Corridor Revitalization project, which will be used to focus on areas identified in Silverton and upstream on the Animas at the old town site of Eureka. The goals of the Animas River Corridor Revitalization Project Plan are to artfully combine historic preservation, riparian restoration, recreation asset development and mining waste cleanup along the Animas River in San Juan County.

The Animas River Corridor Technical and Financial Assistance Workshop brought together federal, state, and local stakeholders to discuss viable technical and financial options and opportunities for coordinating in the reclamation and redevelopment of the Animas River Corridor sites.

The goal for the workshop was to solicit partner input to guide the site redevelopment plan, and to identify potential technical and financial resources to support the plan's implementation. The meeting was a result of public and private coordination intended to identify resources for reclaiming and redeveloping two project sites along the Animas River in San Juan County. Those attending represented Federal, State, and Local government agencies, the Animas River Planning Team, and various selected stakeholders.

The County, ARSG, and Mountain Studies Institute are leading the effort. They have identified and invited those they want to have in attendance; us local, state, and federal agency types are there to listen and help the collaborative process along by finding ways to support the locals; and the hope is that SRA will be able to use their expertise to facilitate the day's events.

Other activities: Region 8 Targeted Brownfields Assessment support has been, and continues to be used to characterize discrete flows and metal loads coming into Upper Cement Creek, from the American Tunnel, and 4-5 other sources, in order to facilitate getting an improved and updated water treatment system on line near or in Gladstone. All preliminary reports from START have been shared with ARSG for input. START developed a Water Treatment Evaluation Report and Addendum Report for EPA and ARSG to help guide their future implementation for the updated system. Since Summer 2007, EPA has been involved in developing an AOC with a landowner who plans to rehabilitate, explore, and possibly re-mine the upper Gold King Mine. Steve Way can provide details on the status of the Upper Gold King project; however, since re-mining would likely involve management of discharge and water treatment on some level, the ARSG and County may not proceed with an updated system until they know how the Upper Gold King landowner will or won't cooperate or influence that process. The Upper Gold King landowner, Todd Hennis, Salem Minerals Corp./Colorado Goldfields, Inc. owns many parcels in San Juan County.

Additional TBA funds were used for START to help the County characterize the Walsh-Martha Rose Smelter site located at the northwestern gateway to Silverton, near the mouth of Mineral Creek on Highway 550. The County used the TBA results to compete successfully for a Brownfields Cleanup Grant. The County plans to redevelop the site into affordable housing, including 48 rental units and 13 "self-help" homes. The County also plans to use a piece of land across Highway 550 for a combined Town and County Maintenance Barn. These developments will help to consolidate and cleanup smelter-related lead and arsenic containing soils and slag, but also provide the town and county some much-needed home sites. A diverse team, including Dr. Alan Berger, Harvard School of Design and T Allan Comp, OSM AMD&Art, met August 8, 2006, to refine the redevelopment and cleanup plan for the Walsh- Martha Rose Smelter site. Presently, the County is awaiting the results of the housing needs assessment to help refine their cleanup plan.

The EPA removal program and an enforcement attorney are involved in drafting the AOC with Todd Hennis, San Juan Corp./Colorado Goldfields, Inc. to oversee

rehabilitation and investigation of the Upper Gold King mine. EPA still needs to figure out ownership and which are the appropriate parties to name in this AOC and we need to nail down financial assurance. For now, the AOC does not contain language related to additional removal actions. Sisk thought it didn't seem to fit, since this AOC is only for investigation work. The language reads, "This Order provides for conducting investigations under CERCLA 104 authorities and specifically the performance of a removal site evaluation by Respondents and the reimbursement of certain response costs incurred by the United States at or in connection with the Gold King mine property located in San Juan County, Colorado, the "Gold King Mine Site" or the "Site.""

The State of Colorado Brownfields Program has TBA funds available that the Town of Silverton or San Juan County may apply for to characterize the Lackawanna Mill site, an historic structure near the Kendall Mountain Recreation Center for which the community has great redevelopment/revitalization ideas. There is also opportunity for more partnering with BLM on projects near and within the Animas River channel. The county has some reuse ideas to redevelop or reuse mine-scarred lands that may require closer scrutiny community; e.g., sand/gravel operation and campground in the only flat places – Water Quality may suffer, may be habitat for Southwestern Willow Flycatcher, an endangered species. Federally protected Canadian lynx inhabit the area.